

WHAT IS CLAIMED IS:

1. A disk drive, comprising:
a disk storage medium having a first range of disk drive host interface
addressable locations accessible by a host computer operating system, at least one
5 of the addressable locations being used to designate a mailbox file; and
a disk controller for responding to a command from the host computer
operating system that references the mailbox file to perform a function
characterized by contents of the mailbox file.
- 10 2. A disk drive according to claim 1, wherein the mailbox file is
located in at least one of the disk storage medium and a computer memory
associated with the disk controller.
3. A disk drive according to claim 1, wherein the first range of disk
15 drive host interface addressable locations is in a first space directly accessible by
the host computer operating system.
4. A disk drive according to claim 1, wherein the function is used to
access a second range of addressable locations that are not disk drive host interface
20 addressable and that are contained on the disk storage medium.
5. A disk drive according to claim 4, wherein information is written to
the second range of addressable locations in an encrypted format.
- 25 6. A disk drive according to claim 4, wherein the disk controller uses
a command block contained in the mailbox file for accessing the second range of
addressable locations.

7. A disk drive according to claim 6, wherein the command block is stored in an encrypted format in the mailbox file.

5 8. A disk drive according to claim 7, wherein information is written to the second range of addressable locations in an encrypted format.

9. A disk drive according to claim 1, wherein the function is used to transfer a key from the mailbox file.

10 10. A disk drive according to claim 1, wherein the function is used to perform a data transformation.

11. A disk drive according to claim 1, the disk drive being compatible with at least one operating system that is capable of accessing disk drives and with at least one disk drive host interface.
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12. A method for accessing storage locations of a disk storage medium in a disk drive using a disk controller, the disk storage medium having a first range of disk drive host interface addressable locations accessible by a host computer operating system, at least one of the addressable locations being used to designate a mailbox file, the method comprising the steps of:
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recognizing a command from the host computer operating system as a reference to the mailbox file; and

25 responding to the command by performing a function characterized by contents of the mailbox file.

13. A method according to claim 12, wherein the mailbox file is located in at least one of the disk storage medium and a computer memory associated with the disk controller.

14. A method according to claim 12, wherein the function is used to access a second range of addressable locations that are not disk drive host interface addressable and that are contained on the disk storage medium.

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15. A method according to claim 14, comprising the step of:
using a command block contained in the mailbox file for accessing the second range of addressable locations.

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16. A method according to claim 15, wherein the command block is stored in an encrypted format in the mailbox file.

17. A method according to claim 16, wherein information is written in an encrypted format to the second range of addressable locations.

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18. A method according to claim 12, wherein the function comprises the step of:
accessing the second range of addressable locations using a file system of an application program.

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19. A method according to claim 18, wherein the application program writes information in an encrypted format to the disk storage medium.

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20. A method according to claim 14, wherein the step of responding comprises the step of:
transferring information between the mailbox file and the second range of addressable locations.

21. A method according to claim 20, comprising the step of:

providing an indication in the mailbox file when a transfer of the information is complete.

22. A method according to claim 20, comprising the step of:
5 decoding an encrypted command from the application program, within the disk drive, to initiate the step of transferring.

23. A method according to claim 22, wherein the information is stored on the disk drive, and transferred between the disk drive and the application
10 program in an encrypted form.

24. A method according to claim 12, comprising the step of:
using a command validation key associated with the mailbox file to at least
one of validate and reject the command.
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